

REMARKS

Claims 1-31 are pending in the present patent application. Claims 1-19 stand rejected. Claims 20-31 have been withdrawn from consideration. This application continues to include claims 1-31.

Applicants confirm the election of claims 1-19 for prosecution. Applicants hereby reserve the right to pursue claims 20-31 in a divisional application.

Applicants have enclosed herewith a Submission of Formal Drawing, including two formal drawings, Figs. 1 and 2.

Claims 1-6, 8, and 14-17 were rejected under 35 U.S.C. §103(a) as being unpatentable over Mason, et al., U.S. Patent Application Publication No. 2002/0026491 A1 (hereinafter, Mason) in view of Toth, U.S. Patent No. 6,018,529. Applicants respectfully request reconsideration of the rejection of claims 1-6, 8, and 14-17 in view of the following.

Mason is directed to wireless local area networks (page 1, paragraph 2). A first LAN includes a host processor 10 connected by a wired communication link 11 that is connected to a number of stationary access points or base stations 12, 13, 14, e.g., via USB, and the base stations are coupled to mobile units 15 (page 2, paragraph 25, Fig. 1). LAN 100 may be coupled to additional LANS 100, 120, 130 via bridges or routers (page 2, paragraph 26, Fig. 1). Host processor 10 includes an I/O module 223 that connects the host computer to various devices, such as a keyboard, video display, and other peripherals (page 3, paragraph 28, Fig. 2).

Base stations 12, 13, 14 each utilize a CPU 230, a communications adapter 233 for connection to communications link 11, and an RF transceiver 234 connected to CPU 230 for RF transmission and reception from remote units 15 (page 3, paragraph 29). Base stations 12, 13, 14 act as intermediaries to relay data between remote units 15 and the host

computer 10 (page 3, paragraph 30). Remote units 15 include a CPU 340 (page 3, paragraph 31, Fig. 3) that controls a transceiver 344 (page 3, paragraph 344).

Toth is directed to integrated services digital network (ISDN) channel bank architecture, which contains a plurality of 'processorless' U-Basic Rate-One Transmission Extension, or U-BRITE, ISDN circuit cards (also known in the industry as Basic Rate Interface Transmission Extension (U-BRITE) cards) (col. 1, lines 10-15). The U-BRITE circuit cards are dedicated to providing extended ISDN service to remote customer premises (col. 1, lines 39-49).

Each U-BRITE card 100 is installed in its own channel backplane 120, and has no processor of its own, but is instead controlled by a common micro-controller of the back controller unit on a bank controller card 130 that is installed in its own card slot of channel backplane 120 (col. 5, lines 42-49).

Applicants believe that claims 1-6, 8, and 14-17 patentably define Applicants' invention over the cited references, Mason in view of Toth, taken alone or in combination, for at least the reasons set forth below.

Claim 1 is directed to a computer network. Claim 1 recites, among other things, a microprocessorless network adapter interconnecting said at least one host computer and said at least one peripheral device.

Mason does not disclose, teach, or suggest a microprocessorless network adapter interconnecting at least one host computer and at least one peripheral device, as recited in claim 1. Rather, Mason discloses that peripheral devices, such as a keyboard and display, are connected to host processor 10 via an I/O module 223, and not via a network and a network adapter (page 3, paragraph 28, Fig. 2).

In addition, Mason Fig. 1 clearly shows that host computer 10 is interconnected with base stations via LAN 100, and LAN 110 and another host computer and other base

stations via LAN 100, bridge 90, and bridge 60, but does not disclose, teach, or suggest a network adapter interconnecting host computer 10 with any peripheral devices.

Although Mason discloses that remote units 15 may be “WLAN adapters” (page 2, paragraph 26), the remote units 15 do not interconnect with host computer 10, but rather, are connected to base units 12, 13, 14 (paragraph 30, Fig. 1), and further, include a CPU (paragraph 31, Fig. 3).

Accordingly, Mason does not disclose, teach, or suggest a microprocessorless network adapter interconnecting at least one host computer and at least one peripheral device, as recited in claim 1.

In addition, Toth does not disclose, teach, or suggest a microprocessorless network adapter interconnecting at least one host computer and at least one peripheral device, as recited in claim 1, nor does the Examiner assert as much. Rather, the Examiner relies on Toth for the asserted teaching of a microprocessorless network adapter.

In contrast to claim 1, Toth is directed to integrated services digital network (ISDN) channel bank architecture, that contains a plurality of ‘processorless’ U-Basic Rate-One Transmission Extension, or U-BR1TE, ISDN circuit cards (col. 1, lines 10-18) that provide extended ISDN service to remote customer premises (col. 1, lines 39-49). Each U-BR1TE card 100 is installed in its own channel backplane 120, and has no processor of its own, but is instead controlled by a common micro-controller of the back controller unit on a bank controller card 130 that is installed in its own card slot of channel backplane 120 (col. 5, lines 42-49).

Thus, rather than a microprocessorless network adapter interconnecting at least one host computer and at least one peripheral device, as recited in claim 1, Toth discloses a U-BR1TE circuit card that is used to provide ISDN service to remote customer premises, but which is asserted by the Examiner to be a network adapter.

However, in contrast to a network adapter, which is known in the art to connect devices such as computers to a network, U-BRITE circuit cards provide extended ISDN service to remote customer premises (col. 1, lines 39-49), and do not perform the device interconnection functions associated with what is known in the art as a network adapter.

Thus, the U-BRITE circuit card is not a network adapter in the context of Applicants' claimed invention, but rather, is employed by a telephone service provider in providing ISDN service from a central office to a customer premises site (col. 1, lines 22-25).

Accordingly, Toth does not disclose, teach, or suggest a microprocessorless network adapter interconnecting at least one host computer and at least one peripheral device, as recited in claim 1.

Notwithstanding the above, the Examiner asserts that it would have been obvious to one having ordinary skill in the art at the time of Applicants' invention to combine Mason with Toth. Applicants respectfully disagree that the invention is obvious over Mason in view of Toth, for at least the reasons that follow.

Making the Mason remote units 15 microprocessorless would render the Mason device inoperable, since the RF transceiver 344 of remote unit 15 is controlled by CPU 340 (page 3, paragraph 31), and thus removal of the processor would render the transceiver that is controlled by CPU 340 inoperable.

Further, even if combined, Mason and Toth would not yield Applicants' claimed invention, since remote unit 15 as a "WLAN adapter" does not interconnect least one host computer and at least one peripheral device, but rather, are connected to base units 12, 13, 14 (paragraph 30, Fig. 1).

Accordingly, for at least the reasons set forth above, Applicants respectfully submit that the cited references, Mason in view of Toth, taken alone or in combination, do not

disclose, teach, or suggest the subject matter of claim 1. Accordingly, claim 1 is believed allowable in its present form.

Claims 2-6 and 8 are believed allowable due to their dependence, directly or indirectly, on otherwise allowable base claim 1. In addition, claims 2-6 and 8 further and patentably define the invention over Mason and Toth, taken alone or in combination.

Claim 14 is directed to a network adapter. Claim 14 recites at least one application specific integrated circuit and support electronics, wherein the adapter is microprocessorless.

In contrast to a network adapter having at least one application specific integrated circuit and support electronics, wherein the adapter is microprocessorless, Mason discloses a remote unit 15 as a "WLAN adapter" that includes a CPU 340 (page 3, paragraph 31, Fig. 3). Thus, the asserted Mason network adapter is not microprocessorless.

Accordingly, Mason does not disclose, teach, or suggest a network adapter having at least one application specific integrated circuit and support electronics, wherein the adapter is microprocessorless, as recited in claim 14.

Toth discloses a U-BRITE circuit card 100, which is asserted to be a network adapter. However, in contrast to a network adapter, which is known in the art to connect devices such as computers to a network, U-BRITE circuit cards provide extended ISDN service to remote customer premises (col. 1, lines 39-49), and do not perform the device interconnection functions associated with what is known in the art as a network adapter, as set forth above with respect to claim 1.

Thus, the U-BRITE circuit card is not a network adapter in the context of Applicants' claimed invention.

Accordingly, Toth does not disclose, teach, or suggest a network adapter having at least one application specific integrated circuit and support electronics, wherein the adapter is microprocessorless, as recited in claim 14.

In addition, as set forth above, the combination of cited references, Mason and Toth, would not yield the invention of claim 14.

Notwithstanding the above, the Examiner asserts that it would have been obvious to one having ordinary skill in the art at the time of Applicants' invention to combine Mason with Toth. Applicants respectfully disagree that the invention is obvious over Mason in view of Toth, for at least the reasons that follow.

Making the Mason remote units 15 microprocessorless would render the Mason device inoperable, since the RF transceiver 344 of remote unit 15 is controlled by CPU 340 (page 3, paragraph 31), and thus removal of the processor would render the transceiver that is controlled by CPU 340 inoperable.

Accordingly, for at least the reasons set forth above, Applicants respectfully submit that the cited references, Mason in view of Toth, taken alone or in combination, do not disclose, teach, or suggest the subject matter of claim 14. Accordingly, claim 14 is believed allowable in its present form.

Claims 15-17 are believed allowable due to their dependence, directly or indirectly, on otherwise allowable base claim 14. In addition, claims 15-17 further and patentably define the invention over Mason and Toth, taken alone or in combination.

For example, claim 16 is directed to the adapter of claim 14, wherein said adapter is configured to interconnect at least one peripheral device and at least one host computer. Mason and Toth, taken alone or in combination, do not disclose, teach, or suggest wherein the adapter is configured to interconnect at least one peripheral device and at least one host computer for substantially the same reasons as set forth above with respect to claim 1.

Accordingly, for at least the reasons set forth above, Applicants respectfully submit that Mason and Toth, taken alone or in combination, do not disclose, teach, or suggest the subject matter of claims 1-6, 8, and 14-17, and thus respectfully request that the rejection of claims 1-6, 8, and 14-17 under 35 U.S.C. 103(a) be withdrawn.

Claims 7 and 9-11 were rejected under 35 U.S.C. §103(a) as being unpatentable over Mason and Toth, in view of Gelvin, et al., U.S. Patent No. 6,832,251 B1 (hereinafter, Gelvin). Applicants respectfully request reconsideration of the rejection of claims 7 and 9-11 in view of the following.

Gelvin is directed to providing distributed network and Internet access to sensors, controls, and processors that are embedded in equipment, facilities, and the environment (col. 1, lines 46-49). Gelvin discloses Wireless Integrated Network Sensor Next Generation (WINS NG) nodes that combine sensing, signal processing, decision capability, and wireless networking capability (col. 9, lines 37-40). The network includes nodes 802, gateway nodes 804, server 806, and web assistants or node control web or browser pages (not shown) (col. 10, lines 54-56). The sensor nodes 802 include any combination of actuators, sensors, signal processors, energy or power supplies, data storage devices, wireless communication devices, wireline communication devices, and self-location capabilities (col. 10, lines 56-60).

Applicants believe that claims 7 and 9-11 patentably define Applicants' invention over the cited references, Mason and Toth in view of Gelvin, taken alone or in combination, for at least the reasons set forth below.

Claim 7 is directed to the network of claim 6, further comprising a remotely attached host computer including one of a device driver and a utility, each said unique internet protocol address being assigned by said one of a device driver and a utility.

Claim 7 depends indirectly from claim 1. As set forth above with respect to claim 1, Mason and Toth do not disclose, teach, or suggest the subject matter of claim 1. Applicants respectfully submit that Gelvin does not overcome the deficiency of Mason and Toth as applied to claim 1, nor does the Examiner assert as much. Rather, the Examiner relies on Gelvin for the asserted teaching of a remotely attached host computer.

Accordingly, claim 7 is believed allowable due to its dependence on otherwise allowable base claim 1. In addition, claim 7 is believed allowable due to its dependence on otherwise allowable intervening claims 2-6.

The Examiner acknowledges that Mason and Toth do not disclose, teach, or suggest the subject matter of claim 7.

In addition, Gelvin does not disclose, teach, or suggest a remotely attached host computer including one of a device driver and a utility, each unique internet protocol address being assigned by one of a device driver and a utility, as recited in claim 7. Rather, Gelvin discloses Wireless Integrated Network Sensor Next Generation (WINS NG) nodes that combine sensing, signal processing, decision capability, and wireless networking capability (col. 9, lines 37-40), which is unrelated to the subject matter of claim 7.

Thus, as set forth above, the combination of Mason and Toth in view of Gelvin would not yield the invention of claim 7.

Accordingly, claim 7 is believed allowable in its own right.

Claim 9 is directed to the network of claim 1, wherein said adapter is configured to manage power on said at least one peripheral device.

Claim 9 is believed allowable due to its dependence on otherwise allowable base claim 1 for substantially the same reasons as set forth above with respect to claim 7.



In addition, Mason and Toth do not disclose, teach, or suggest the subject matter of claim 9, as acknowledged by the Examiner.

Regarding Gelvin, although Gelvin discloses a WINS preprocessor 1504 managing a WINS processor 1520 power, the WINS preprocessor 1504 and/or the WINS processor 1520 do not disclose, teach, or suggest a network adapter, but rather, pertain to Wireless Integrated Network Sensor Next Generation (WINS NG) nodes that combine sensing, signal processing, decision capability, and wireless networking capability (col. 9, lines 37-40), which are unrelated to the subject matter of claim 9.

Thus, as set forth above, the combination of Mason and Toth in view of Gelvin would not yield the invention of claim 9.

Accordingly, claim 9 is believed allowable in its own right.

Claim 11 is directed to network of claim 1, wherein said adapter is configured to at least one of send a wake-up command to said at least one peripheral device and verify an active status of said at least one peripheral device before accepting the inbound data.

Claim 11 is believed allowable due to its dependence on otherwise allowable base claim 1 for substantially the same reasons as set forth above with respect to claim 7.

In addition, claim 11 is believed allowable in its own right for substantially the same reasons as set forth above with respect to claim 9, since the combination of Gelvin with Mason and Toth would not yield a microprocessorless network adapter, much less a network adapter configured as set forth in claim 11.

Accordingly, for at least the reasons set forth above, Applicants respectfully submit that Mason and Toth in view of Gelvin, taken alone or in combination, do not disclose, teach, or suggest the subject matter of claims 7 and 9-11, and thus respectfully request that the rejection of claims 7 and 9-11 under 35 U.S.C. 103(a) be withdrawn.

Claims 12, 13, 18, and 19 were rejected under 35 U.S.C. §103(a) as being unpatentable over Mason and Toth, in view of Braun, et al., U.S. Patent No. 6,411,276 B1 (hereinafter, Braun). Applicants respectfully request reconsideration of the rejection of claims 12, 13, 18, and 19 in view of the following.

Braun is directed generally to interface devices for allowing humans to interface with computer systems, and more particularly to low-cost computer interface devices that allow computer systems to provide haptic feedback to the user (col. 1, lines 29-33). Braun discloses that it is becoming increasingly common for computer peripheral devices is to provide the ability for peripherals to enumerate their capabilities to the host system (col. 19, lines 45-48), which would allow that host software to be made flexible enough that it would be able to handle many different devices with different capabilities dynamically, without having to be programmed specifically for each device (col. 19, lines 48-52).

Applicants believe that claims 12, 13, 18, and 19 patentably define Applicants' invention over the cited references, Mason and Toth in view of Braun, taken alone or in combination, for at least the reasons set forth below.

Claim 12 is directed to the network of claim 1, wherein said adapter is configured to perform automatic USB enumeration.

As set forth above with respect to claim 1, Mason and Toth do not disclose, teach, or suggest the subject matter of claim 1. Applicants respectfully submit that Braun does not overcome the deficiency of Mason and Toth as applied to claim 1, nor does the Examiner assert as much. Rather, the Examiner relies on Braun for the asserted teaching of a network adapter being configured to perform automatic enumeration.

Accordingly, claim 12 is believed allowable due to its dependence on otherwise allowable base claim 1.

The Examiner acknowledges that Mason and Toth do not disclose, teach, or suggest the subject matter of claim 12.

In addition, Braun does not disclose, teach, or suggest a network adapter that is configured to perform automatic USB enumeration. Rather, Braun discloses that peripherals may be allowed to enumerate their abilities. A peripheral that may enumerate its abilities does not disclose, teach, or suggest a network adapter configured to perform automatic USB enumeration.

For example, a peripheral is not a network adapter. In particular, the network adapter of claim 1 interconnects at least one host computer and at least one peripheral device, which a peripheral, as that term is used in the art, does not do. Thus, without regard to whether the Braun peripherals are configured to perform automatic USB enumeration, the Braun peripherals are not network adapters, and thus, Braun does not disclose, teach, or suggest a network adapter that is configured to perform automatic USB enumeration, as recited in claim 12.

Further, the term, “enumeration,” as used by Braun, does not relate to the “enumeration” disclosed in Applicants’ specification. For example, “enumeration,” in accordance with the present invention, includes determining what devices are on the network and assigning addresses (see Applicants’ specification at page 5, lines 30-32). However, the Braun “enumeration” pertains merely to peripherals enumerating, i.e., listing, their abilities and how they provide data to host systems, and how they expect to receive data (col. 19, lines 52-57).

The relied-upon Braun passage simply does not disclose, teach, or suggest determining what devices are on the network and assigning addresses, and hence does not disclose, teach, or suggest that the peripherals are configured to perform automatic USB enumeration within the context of Applicants’ claimed invention.

Thus, Braun does not disclose, teach, or suggest automatic enumeration within the context of Applicants' claimed invention.

Accordingly, the combination of Mason and Toth in view of Braun would not yield the invention of claim 12, and claim 12 is thus believed allowable in its own right.

Claim 13 is directed to network of claim 12, wherein said enumeration is performed without software.

Claim 13 is believed allowable due to its dependence on otherwise allowable base claim 1 for substantially the same reasons as set forth above with respect to claim 12.

In addition, claim 13 is believed allowable due to its dependence on otherwise allowable intervening claim 12.

The Examiner acknowledges that Mason and Toth do not disclose, teach, or suggest the subject matter of claim 13.

Further, Braun does not disclose, teach, or suggest wherein the enumeration is performed without software. Rather, the relied-upon Braun passage discloses that host software can be made flexible enough that it will be able to handle many different devices with different capabilities dynamically without having to be programmed specifically for each device (col. 19, lines 48-52). However, host software that is flexible so as to not require specific programming for each device is unrelated to and does not disclose, teach, or suggest a network adapter configured to perform automatic USB enumeration, wherein the enumeration is performed without software, as recited in claim 13.

Accordingly, the combination of Mason and Toth in view of Braun would not yield the invention of claim 13, and claim 13 is thus believed allowable in its own right.

Claim 18 is directed to adapter of claim 14, wherein said application specific integrated circuit is configured to perform automatic USB enumeration.

As set forth above with respect to claim 14, Mason and Toth do not disclose, teach, or suggest the subject matter of claim 14. Applicants respectfully submit that Braun does not overcome the deficiency of Mason and Toth as applied to claim 14, nor does the Examiner assert as much. Rather, the Examiner relies on Braun for the asserted teaching of a network adapter being configured to perform automatic enumeration.

Accordingly, claim 18 is believed allowable due to its dependence on otherwise allowable base claim 14.

In addition, Mason and Toth in view of Braun, taken alone or in combination, do not disclose, teach, or suggest wherein the application specific integrated circuit is configured to perform automatic USB enumeration, as recited in claim 18, for substantially the same reasons as set forth above with respect to claim 12.

Claim 18 is thus believed allowable in its own right.

Claim 19 is directed to adapter of claim 18, wherein said enumeration is performed without software.

Claim 19 is believed allowable due to its dependence on otherwise allowable base claim 14 for substantially the same reasons as set forth above with respect to claim 18.

In addition, claim 19 is believed allowable due to its dependence on otherwise allowable intervening claim 18.

Further, Mason and Toth in view of Braun, taken alone or in combination, do not disclose, teach, or suggest wherein the enumeration is performed without software, as recited in claim 19, for substantially the same reasons as set forth above with respect to claim 13.

Accordingly, claim 19 is believed allowable in its own right.

Accordingly, for at least the reasons set forth above, Applicants respectfully submit that Mason and Toth in view of Braun, taken alone or in combination, do not disclose,

teach, or suggest the subject matter of claims 12, 13, 18, and 19, and thus respectfully request that the rejection of claims 12, 13, 18, and 19 under 35 U.S.C. 103(a) be withdrawn.

For the foregoing reasons, Applicants submit that no combination of the cited references teaches, discloses or suggests the subject matter of the appended claims. The appended claims are therefore in condition for allowance, and Applicants respectfully request withdrawal of all rejections and allowance of the claims.

In the event Applicants have overlooked the need for an extension of time, an additional extension of time, payment of fee, or additional payment of fee, Applicants hereby conditionally petition therefor and authorize that any charges be made to Deposit Account No. 20-0095, TAYLOR & AUST, P.C.

Should any question concerning any of the foregoing arise, the Examiner is invited to telephone the undersigned at (317) 894-0801.

Respectfully submitted,



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Name of Registered Representative



Signature

June 27, 2005

Date

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